

SUB B17

1. (Amended) In a computer system having a processor executing at least one application program and a video decoder decoding a video data for display, an extraction circuit for extracting from the video data a plurality of header data each associated with one of a plurality of starting code types, the extraction circuit comprising:

a starting code detector receiving the video data, and operable to detect a starting code contained in the video data while the processor is executing the application program and operable to prevent an interrupt from being passed to the processor when a starting code is detected;

a branch circuit having an input connected to the starting code detector, and operable to branch the header data associated with the detected starting code type; and

a plurality of register units connected to the branch circuit for receiving the branched header data, each register unit being associated with one of the plurality of starting code types and each operable to store the header data associated with the register unit;

wherein the state machine includes means for recognizing the occurrence of quantization tables in the data flow and for branching the data relative to these tables to a circuit for restoring quantization arrays; and

wherein the state machine is associated with a calculator for converting the data contained in the headers, prior to their storage in one of the three register banks, into instructions directly interpretable by a video decoder and accessible in any order by a microprocessor.

Please add new claim 17.

A2 --17. In a computer system having a processor executing at least one application program and a video decoder decoding a video data for display, an extraction circuit for extracting from the video data a plurality of header data each associated with one of a plurality of starting code types, the extraction circuit comprising:

a starting code detector receiving the video data, and operable to detect a starting code contained in the video data while the processor is executing the application program;

a branch circuit having an input connected to the starting code detector, and operable to branch the header data associated with the detected starting code type; and

three register units connected to the branch circuit for receiving the branched header data, each register unit being associated with one of the plurality of starting code types and each operable to store the header data associated with the register unit, the three register units respectively storing information related to a sequence header, group header and image header;

wherein the state machine includes means for recognizing the occurrence of quantization tables in the data flow and for branching the data relative to these tables to a circuit for restoring quantization arrays; and

wherein the state machine is associated with a calculator for converting the data contained in the headers, prior to their storage in one of the three register banks, into instructions directly interpretable by a video decoder and accessible in any order by a microprocessor.--

REMARKS

Claims 1-17 are pending in the application. Claim 1 is being amended. Claim 17 is being newly presented.

In the parent case, the Examiner rejected claims 1-14, and 16-17 under 35 U.S.C. §103(a) as being suggested by Artieri in view of Ueda. The Applicant respectfully traverses this rejection.

An important feature of embodiments of the invention is the organization of the storage of the quantization tables and the fact that the tables are made directly interpretable by the video decoder, without being processed by the microprocessor.

As discussed in the specification on Page 3, lines 1-4 and Page 4, lines 16-19, the quantization tables used for coding of a sequence are either standardized tables established by the MPEG 1 standard, or the tables are processed byte after byte to organize their storage, thereby overwhelming the microprocessor. Neither Artieri nor Ueda differ from the prior art, in this respect.

The Examiner states that Artieri includes "means for recognizing the occurrence of quantization tables in the data flow (sequence header) and for branching the

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